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NOTICE OF ALLOWANCE AND FEE(S) DUE

530 7590 03/10/2009

LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER	
NGUYEN, TANH Q	
ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 03/10/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,688	11/14/2001	Takeo Morinaga	SONYJP-135	3830

TITLE OF INVENTION: INFORMATION PROCESSING APPARATUS AND METHOD AND RECORDING MEDIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/10/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

530 7590 03/10/2009

**LERNER, DAVID, LITTENBERG,
 KRUMHOLZ & MENTLIK
 600 SOUTH AVENUE WEST
 WESTFIELD, NJ 07090**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/10/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, TANH Q	2182	725-145000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.	1. _____
<input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2. _____
	3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies

- A check is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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			NGUYEN, TANH Q	
			ART UNIT	PAPER NUMBER
			2182	
DATE MAILED: 03/10/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1106 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1106 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No. 09/913,688	Applicant(s) MORINAGA, TAKEO
	Examiner TANH Q. NGUYEN	Art Unit 2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to RCE and amendment filed December 19, 2008.

2. The allowed claim(s) is/are 19,20,35,37,43,45,46,48,49 and 51.

3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. ____.

3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date ____.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____.
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application
6. Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other ____.

/TANH Q. NGUYEN/
Primary Examiner, Art Unit 2182
TQN: February 27, 2009

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. *A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 19, 2008 has been entered.*

EXAMINER'S AMENDMENT

2. *An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.*

Authorization for this examiner's amendment was given in a telephone interview with the attorney for applicant, Natalie S. Morelli (Reg. No. 58,545) on February 27, 2009 to correct minor informalities, cancel non-elected claims, and incorporate allowable subject matter in selected claims to put the application in condition for allowance.

The application has been amended as follows:

19. (currently amended) A digital broadcast receiving apparatus communicating with a hard disk of a hard disk drive, comprising:

receiving means for receiving a stream constructed by packets of a predetermined format under control of a central processing unit;

extracting means for extracting packets from the packets constructing said stream received by said receiving means;

memory means for storing said extracted packets for recording;

memory control means for controlling writing said extracted packets into said memory means, for controlling reading of said stored packets from said memory means, for issuing a command to prepare transferring before an amount of said packets stored by said memory means reaches a full capacity, and for supplying a start address of said hard disk;

index adding means, residing outside ~~a~~ the central processing unit, for adding an address of a sector of minimum unit (block) of recording on said hard disk drive as an index to said packets read out by said memory control means and for outputting said packets having the added address to said hard disk;

an arbiter, external to said memory control means, for mediating said packets extracted by said extracting means ~~and stored for storage~~ in said memory means, and for mediating said packets outputted from said memory means to said index adding means in response to an instruction from said memory control means;

packets transferring control means for permitting write of said packets outputted from said index adding means to said hard disk drive in accordance with said command from said memory control means, wherein said packets transferring control means includes address determining means for starting updating an address of said hard disk

when said start address is inputted from said memory control means by counting up said address of said memory means each time packets of a predetermined data amount are transferred, and setting address information for the transferred packets of the predetermined data amount; and

wherein the address added by said index adding means includes adds the address including at least one of an address in said hard disk drive in which a just-previous block has been recorded, an address in said hard disk drive in which a current block is recorded, and an address in said hard disk drive in which a just-subsequent block is recorded; and

wherein said address determining means has an internal counter for automatically setting said address information.

Canceled claims 25-34.

35. (currently amended) An information processing method comprising:
receiving a stream constructed by packets of a predetermined format under control of a central processing unit;
extracting packets from the packets constructing said received stream;
using a memory means to store said extracted packets for recording;
using a memory control means controller to control writing of said extracted packets into said memory means, to control reading of said stored packets from said memory means, to issue a command to prepare transferring before an amount of said

packets stored by said memory ~~means~~ reaches a full capacity, and to supply a start address of a recording device;

using an index adding unit means, residing outside a the central processing unit, to add an address of a sector of minimum unit of recording on a recording device drive as an index to said packets read out by said memory controller control means and to output said packets having the added address to said recording device;

using an arbiter, external to said memory controller, to mediate said extracted packets extracted by said extracting means and stored for storage in said memory ~~means~~, and to mediate said packets outputted from said memory ~~means~~ to said index adding unit means in response to an instruction from said memory controller control means; and

using a packets transferring control means for permitting write of said packets outputted from said index adding unit to said recording device in accordance with said command from said memory controller, to permit write of said packets outputted from said index adding unit means to said recording device in accordance with said command from said memory controller control means, wherein said packets transferring control means includes an address determining unit means for starting updating an address of said recording device means when said start address is inputted from said memory controller control means by counting up said address of said memory ~~means~~ each time packets of a predetermined data amount are transferred, and setting address information for the transferred packets of the predetermined data amount; and

wherein the address added by said index adding unit includes means adds the

~~address including~~ at least one of an address in said recording device drive in which a just-previous block has been recorded, an address in said recording device drive in which a current block is recorded, and an address in said recording device drive in which a just-subsequent block is recorded; and

wherein said address determining unit means has an internal counter for automatically setting said address information.

Canceled claim 36.

37. (currently amended) A recording medium in which a computer-readable program has been recorded, wherein said program, when executed, comprises the steps of:

receiving a stream constructed by packets of a predetermined format under control of a central processing unit;

extracting packets from the packets constructing said received stream;

using a memory means to store said extracted packets for recording;

using a memory controller control means to control writing of said extracted packets into said memory, to control reading of said stored packets from said memory, to issue a command to prepare transferring before an amount of said stored packets stored by said memory reaches a full capacity, and to supply a start address of a recording device;

using an index adding unit means residing outside a the central processing unit,

adding to add an address of a sector of minimum unit of recording on a recording device drive as an index to said packets read out by said memory controller control means and for outputting to output said packets having the added address to said recording device;

using an arbiter, external to said memory controller, to mediate said extracted packets extracted and stored for storage in said memory means, and to mediate said packets outputted from said memory means to said index adding unit means in response to an instruction from said memory controller control means; and

using a packets transferring control means for permitting write of said packets outputted from said index adding unit to said recording device in accordance with said command from said memory controller, to permit write of said packets outputted from said index adding unit means to said recording device in accordance with said command from said memory controller control means, wherein said packets transferring control means includes an address determining unit means for starting updating an address of said recording device means when said start address is inputted from said memory controller control means by counting up said address of said memory means each time packets of a predetermined data amount are transferred, and setting address information for the transferred packets of the predetermined data amount; and

wherein the address added by said index adding unit includes means adds the address including at least one of an address in said recording device drive in which a just-previous block has been recorded, an address in said recording device drive in which a current block is recorded, and an address in said recording device drive in which a just-subsequent block is recorded; and

wherein said address determining unit ~~means~~ has an internal counter for automatically setting said address information.

Canceled claim 38.

45. (currently amended) An information processing method according to claim 35, wherein

~~said~~ storing extracted packets for recording includes storing extracted packets into an input FIFO, and

~~said~~ transferring of extracted packets is made cluster by cluster, said cluster being of another predetermined data amount.

48. (currently amended) A recording medium in which a computer-program readable program has been recorded according to claim 37, wherein

storing extracted packets for recording includes storing extracted packets into an input FIFO, and

~~said~~ transferring of extracted packets is made cluster by cluster, said cluster being of another predetermined data amount.

51. (currently amended) A digital broadcasting receiving apparatus according to claim 19, wherein said packets transferring control means further includes a register for memory address comparison, wherein a maximum address of the memory means may

be set in said register, and wherein the memory address may be automatically returned to the start address after counting-up to the maximum address.

Allowable Subject Matter

3. *The following is an examiner's statement of reasons for allowance:*

The prior art, individually or in combination, does not teach a packets transferring control means for permitting write of packets outputted from index adding means (or index adding unit) to a hard disk drive (or recording device drive) in accordance with a command from a memory control means (or memory controller), and an arbiter external to the memory control means (or memory controller) – with the packets transferring control means as disclosed in FIG. 4-FIG. 6 on account of applicant invoking 112, 6th paragraph in the claims.

With respect to claims 19-20, 43, 51, applicant identifies the memory means as 60, FIG. 3 (instead of 61, FIG. 3 - per interview dated August 13, 2008).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Specification

Note that the title was amended in the response filed June 27, 2006 as follows:
**INFORMATION PROCESSING APPARATUS AND METHOD FOR HANDLING
PACKET STREAMS.**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANH Q. NGUYEN whose telephone number is (571)272-4154. The examiner can normally be reached on M-F (9:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TARIQ HAFIZ can be reached on (571)272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TANH Q. NGUYEN/
Primary Examiner, Art Unit 2182